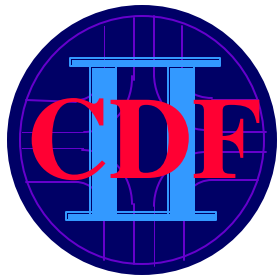


CDF Status Report

Eric James

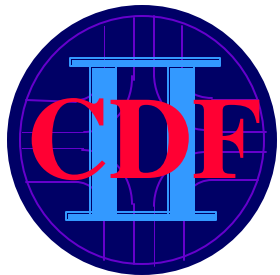
August 19, 2002

All Experimenters' Meeting



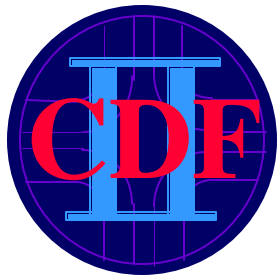
COT

- COT SL2 unable to hold high voltage at start of Store #1657 (Sunday 8/11).
- COT experts isolated the problem to the HV supply for Sense Wire 5 in Quadrant C (180->270deg).
- No smoking gun was found during a 24 hour supervised access (Sunday-Monday).



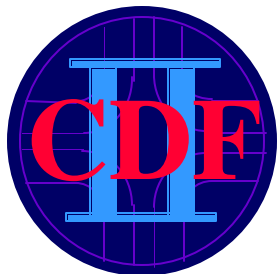
COT

- On Tuesday, COT experts were able to construct a stable running configuration with Sense Wires 4-7 disabled for all cells in quadrant C (48 cells x 4 wires).
- In order to preserve trigger efficiency, the inputs for the 192 disabled wires were masked ON in the Level 1 track finding hardware.

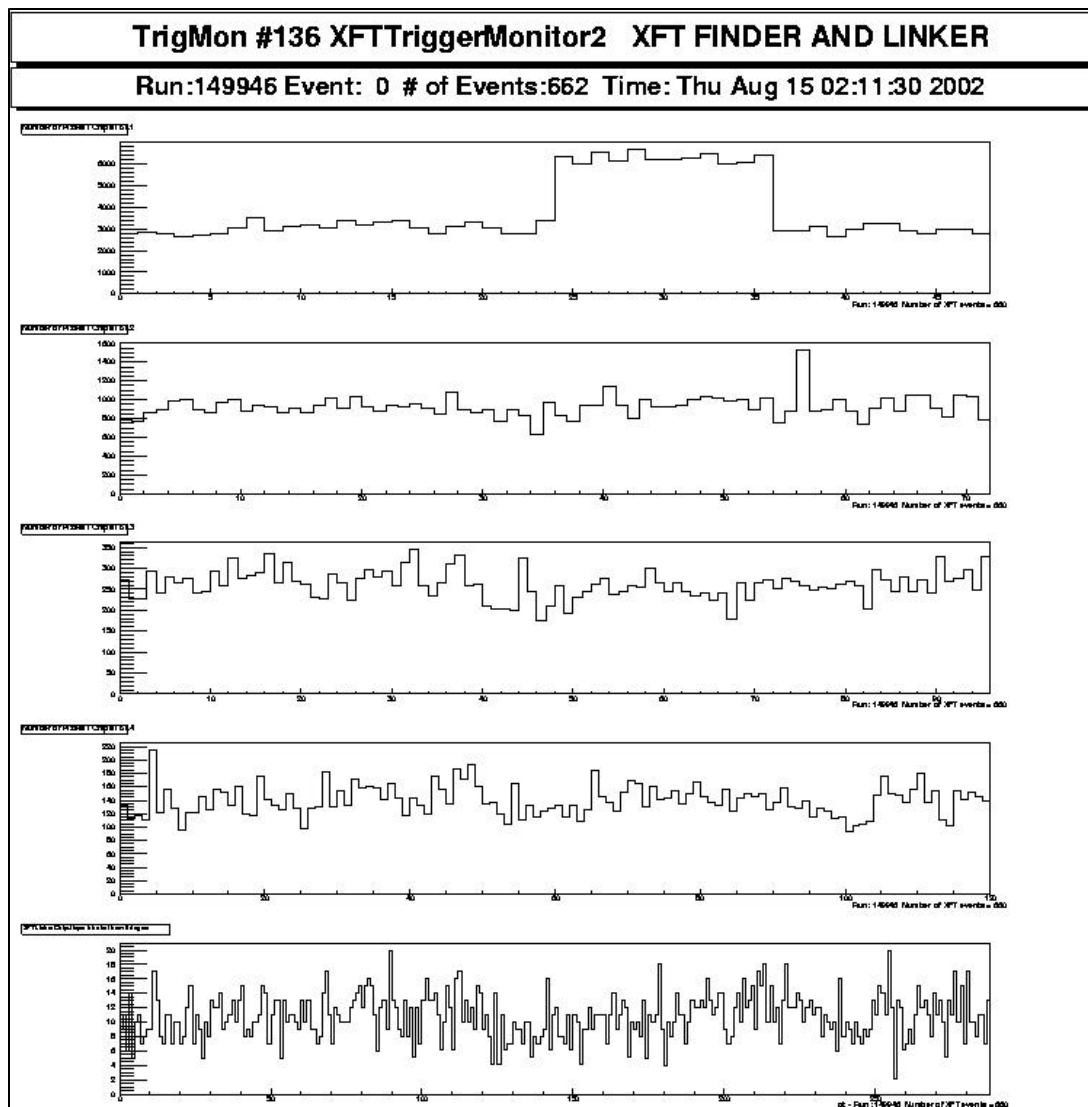


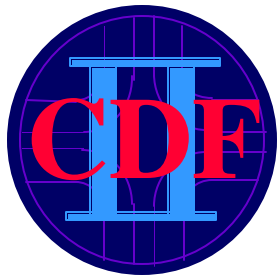
COT

- Overall trigger performance seems to be relatively unaffected.
- Concluded that we are able to take quality data in this configuration.



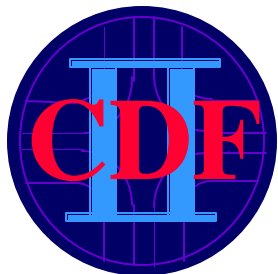
XFT Performance



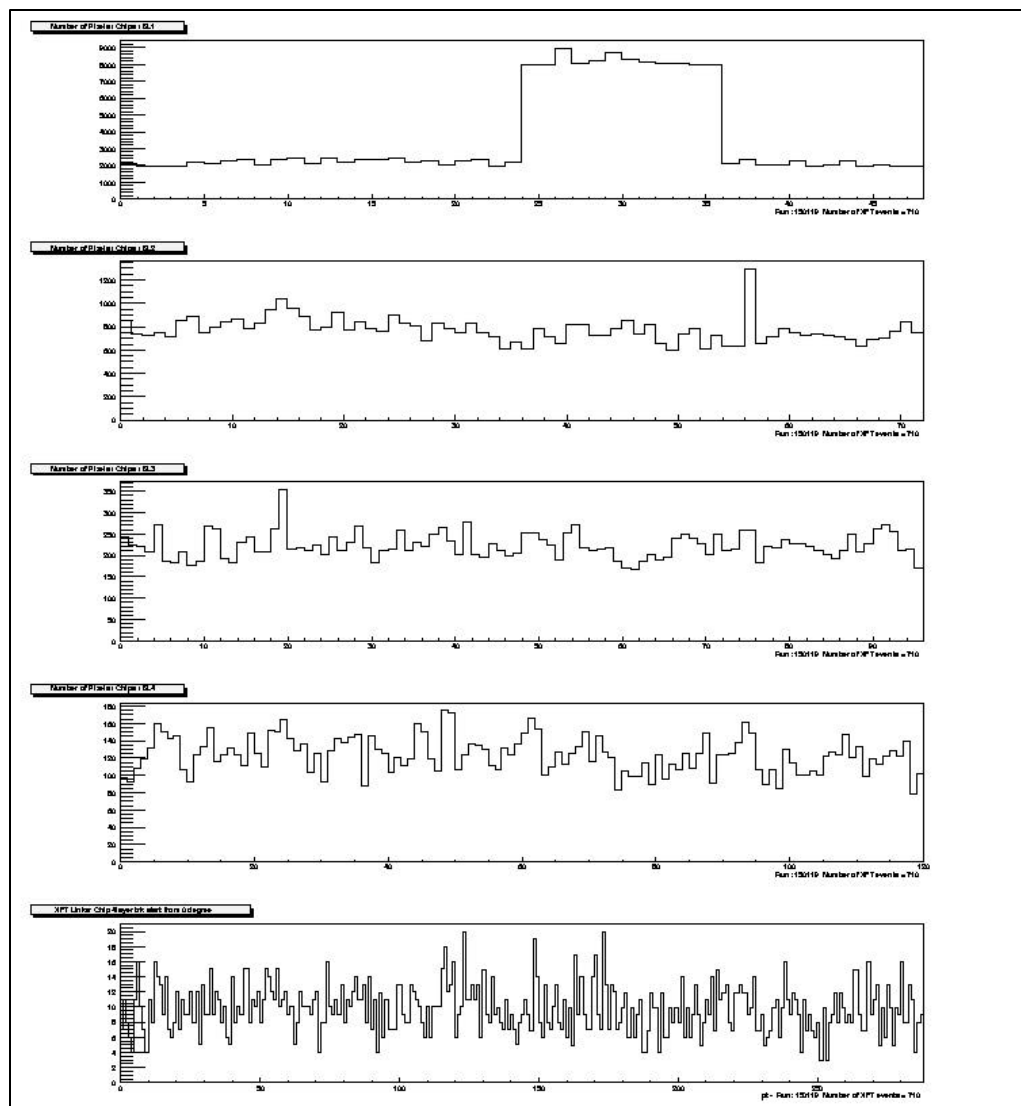


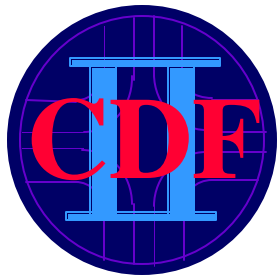
COT

- Last night the situation deteriorated somewhat. Our best present stable running configuration for the COT is Sense Wires 3-8 disabled for all cells in quadrant C (48 cells x 6 wires).
- Even in this new configuration, the track trigger performance does not seem to be seriously degraded.



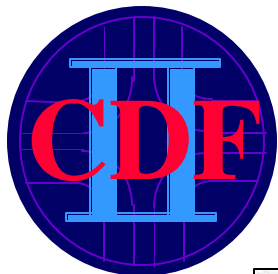
XFT Performance



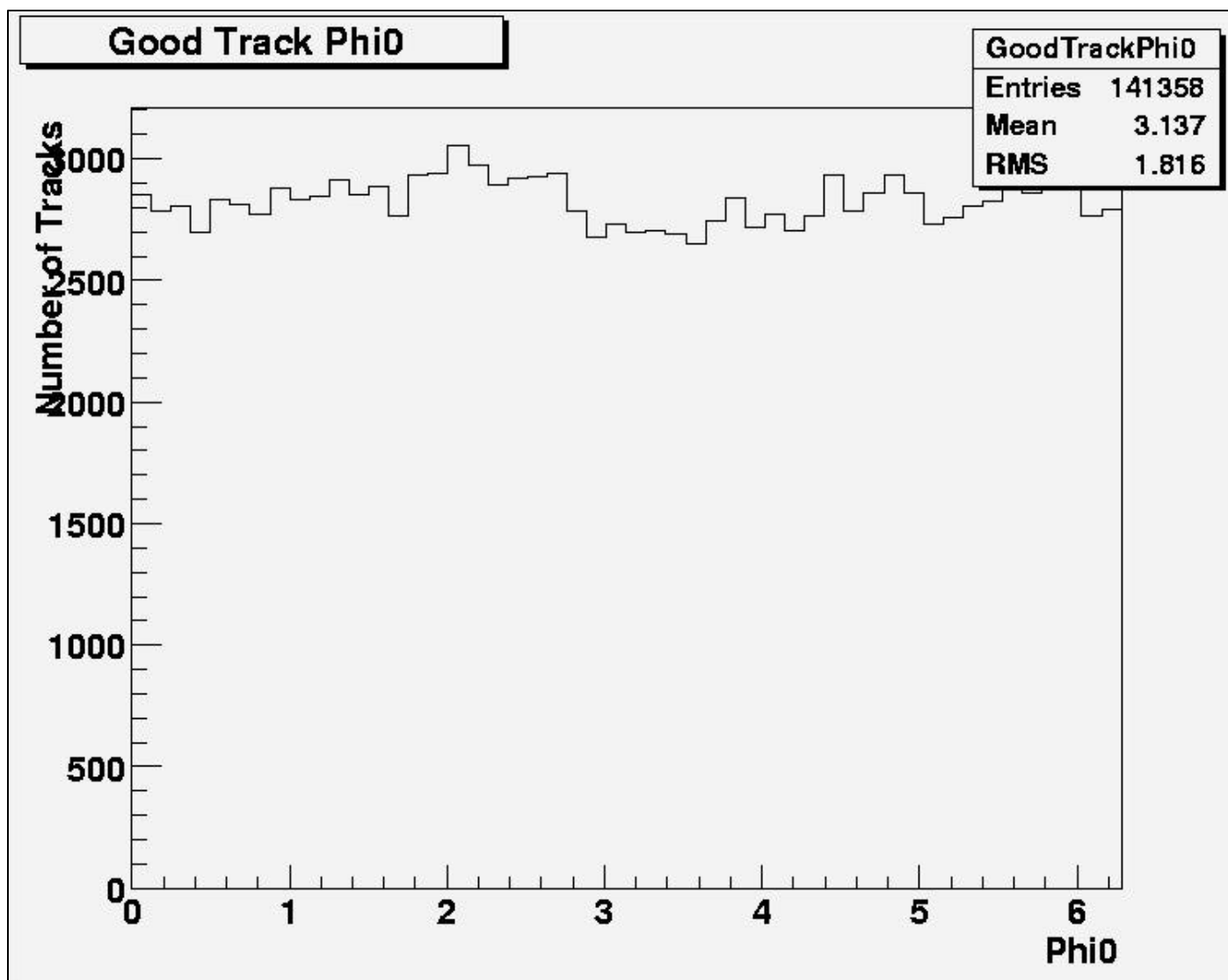


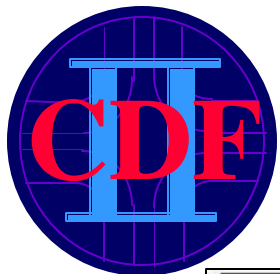
COT

- Track reconstruction efficiency is another issue.
- We do observe a small loss in track reconstruction efficiency as a function of the number of disabled wires.

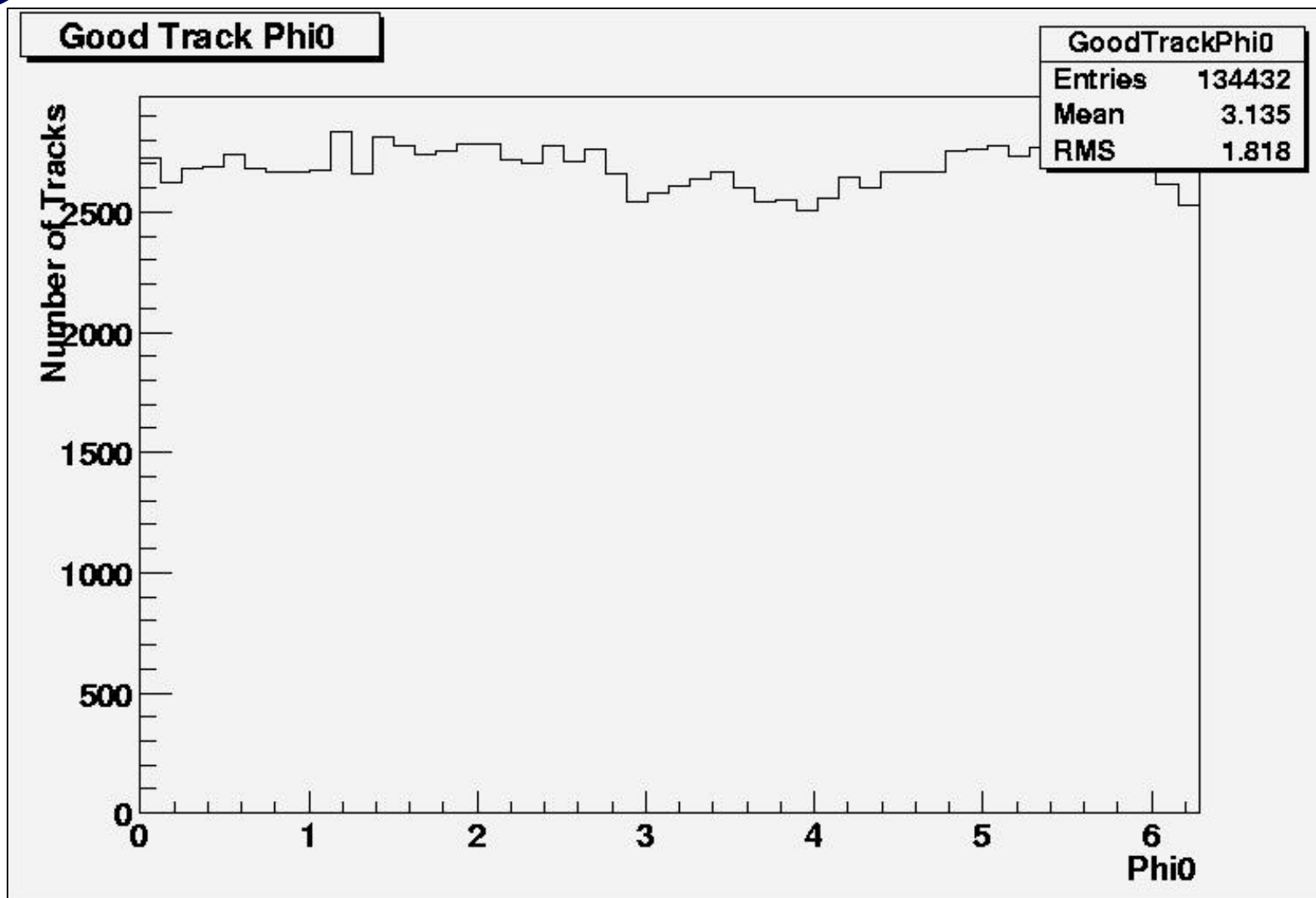


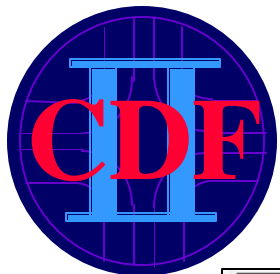
No Disabled Wires



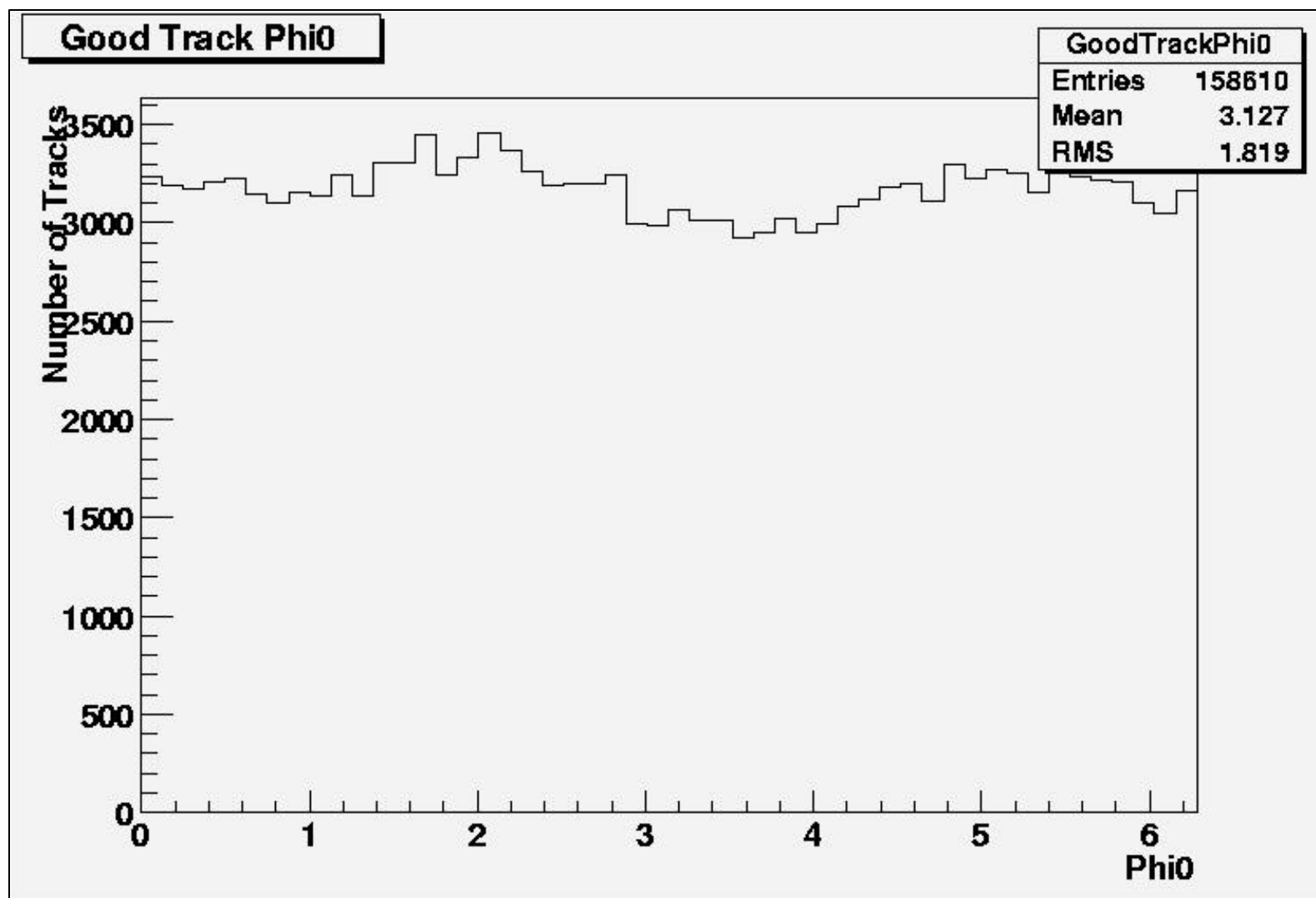


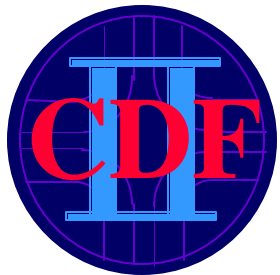
4x48 Disabled Wires





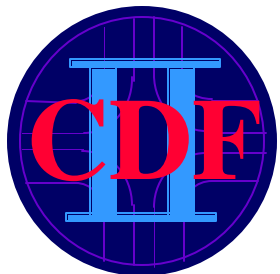
6x48 Disabled Wires





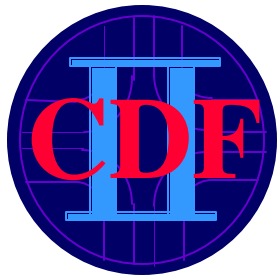
COT

- Further analysis has narrowed the COT high voltage problem to a single wire in the tracking chamber.
- This single wire can be disabled at the chamber face with a 2-3 shift access to the collision hall.
- In the short term we believe that we can continue to take quality data in our present configuration.



Store Summary

| Store | Date | Initial Luminosity | Comments |
|-------|--------------|--------------------|---|
| 1661 | T August 13 | 24.0 e30 | COT off |
| 1663 | R August 15 | 20.5 e30 | Early Quench |
| 1665 | R August 15 | 19.2 e30 | 315.8 nb ⁻¹ written to tape |
| 1667 | F August 16 | 19.1 e30 | 389.5 nb ⁻¹ written to tape |
| 1668 | Sa August 17 | 24.5 e30 | 766.5 nb ⁻¹ written to tape |



Recent Losses

